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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/406,798	09/28/1999	HIROSI TUNODA	991094	1948

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ARMSTRONG, WESTERMAN & HATTORI, LLP
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EXAMINER

MISLEH, JUSTIN P

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 05/09/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

10

Office Action Summary

Application No.

09/406,798

Applicant(s)

TUNODA, HIROSI



Examiner

Justin P Misleh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 - 18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,4,5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The Examiner suggests a title that encompasses the actual method of the invention.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 7, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Ogino (US 5 852 467).

4. For claim 1, Ogino discloses, as shown in figures 3 and 4 and as stated in columns 2 (lines 47 – 51), 3 (lines 42 – 45), 6 (lines 19 – 40 and 67), and 7 (lines 1- 17 and 24 – 32), a method for recording image, comprising the steps of storing image data obtained by an image pickup operation in a storage medium (6); measuring the amount of the image data stored in the storage medium until reaching a predetermined amount of data and after reaching the predetermined amount of data (figure 4 flowchart step 27); recording the image data being stored in the storage medium into a non-volatile recording medium (11a), in parallel with the step of

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storing in the storage medium image data obtained by the image pickup operation performed after reaching the predetermined amount of data.

5. As for claim 7, Ogino discloses, as shown in figures 3 and 4 and as stated in columns 2 (lines 47 – 51), 3 (lines 42 – 45), 6 (lines 19 – 40 and 67), and 7 (lines 1- 17 and 24 – 32), an image pickup apparatus comprising: an optical lens (1); an image pickup device for taking image through the optical lens (3); storage instructing means (memory control unit 7) for storing image data obtained by an image pickup operation of the image pickup device in a storage medium (6); record instructing means (10) for allowing to record the image data from the storage medium to a non-volatile recording medium (11a); measuring means for measuring of the amount of image data stored in the storage medium (memory control unit 7 and system controller 9, also see figure 4 flowchart step 27); and parallel processing instructing means (system controller 9), after reaching the predetermined amount of data, for instructing the record instructing means to record into a non-volatile recording medium the image data being stored in the storage medium in parallel with the storing operation of image data obtained by the image pickup operation performed after reaching the predetermined amount of data.

6. As for claim 13, Ogino discloses, as shown in figures 3 and 4 and as stated in columns 2 (lines 47 – 51), 3 (lines 42 – 45), 6 (lines 19 – 40 and 67), and 7 (lines 1- 17 and 24 – 32), an image pickup apparatus where image data by obtained by an image pickup operation are stored in a storage medium and the image data being stored in the storage medium are recorded into a non-volatile recording medium, the image pickup apparatus comprising: an optical lens (1); an image pickup device (3) for taking image through the optical lens a controller (9) which is capable of performing the following operations;

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- i) Storing the image data in the storage medium (6);
- ii) Measuring the amount of the image data stored in the storage medium until reaching a predetermined amount of data (see figure 4 flowchart step 27);
- iii) After reaching the predetermined amount of data, recording the image data being stored in the storage medium into the recording medium (11), in parallel with the operation of storing image data obtained by the image pickup operation, the image pickup operation being performed after reaching the predetermined amount of data.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 8, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogino in view of Anderson et al.

9. For claims 2 and 14, Ogino discloses, as shown in figures 3 and 4 and as stated in columns 2 (lines 47 – 51), 3 (lines 42 – 45), 6 (lines 19 – 40 and 67), and 7 (lines 1- 17 and 24 – 32), a storage medium (6) for storing image data obtained by an image pickup operation and a non-volatile recording medium (11a) for recording the image data being stored in the storage medium. However, Ogino does not disclose storing in the storage medium storage information including a start address and data length of the image data being stored in the storage medium and recording the image data being stored in the storage medium to the recording medium based

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on the storage information. Anderson et al. also disclose, as shown in figures 2 – 4 and as stated in columns 3 (lines 54 – 64), 4 (lines 1 – 12, 21 – 25, and 41 – 67), and 5 (lines 1 – 48), a storage medium (RAM 60) and a non-volatile recording medium (Flash Memory 64) for storing image data. Anderson et al. disclose storing in the storage medium (60) storage information (in Data Cells 76) including a start address and data length (through the use of “pointers”) of the image data being stored in the storage medium and recording the image data being stored in the storage medium to the recording medium based on the storage information (processing requests and “Compressed Image Data in Flash Memory” flags). As stated in column 2 (lines 18 – 29), at the time the invention was made, one with ordinary skill in the art would have been motivated to have stored storage information in the storage medium, including a start address and data length of the image data being stored in the storage medium, and recording the image data being stored in the storage medium to the recording medium based on the storage information as taught by Anderson et al. in the storage medium of Ogino as a means to maintain the storage medium in a condition to receive new image data from the imaging device. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to have stored storage information in the storage medium as taught by Anderson et al. in the storage medium of Ogino.

10. As for claim 8, Ogino discloses, as shown in figures 3 and 4 and as stated in columns 2 (lines 47 – 51), 3 (lines 42 – 45), 6 (lines 19 – 40 and 67), and 7 (lines 1- 17 and 24 – 32), a storage medium instructing means (7) for storing image data obtained by an image pickup operation and a non-volatile recording medium instructing means (10) for recording the image data being stored in the storage medium. However, Ogino does not disclose an image pickup

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apparatus wherein the storage instructing means stores in the storage medium storage information including a start address and data length of the image data stored in the storage medium and the record instructing means allows to record the image data stored in the storage medium into the recording medium based on the storage information. Anderson et al. also disclose, as shown in figures 2 – 4 and as stated in columns 3 (lines 54 – 64), 4 (lines 1 – 12, 21 – 25, and 41 – 67), and 5 (lines 1 – 48), a storage medium (RAM 60), a storage medium instructing means (Processing Unit 54), a non-volatile recording medium (Flash Memory 64), and a non-volatile recording medium instructing means (I/O Interface 62) for storing image data. Anderson et al. disclose an image pickup apparatus wherein the storage instructing means (54) stores in the storage medium (60) storage information (in Data Cells 76) including a start address and data length (through the use of “pointers”) of the image data stored in the storage medium and the record instructing means allows to record the image data stored in the storage medium into the recording medium based on the storage information (processing requests and “Compressed Image Data in Flash Memory” flags). As stated in column 2 (lines 18 – 29), at the time the invention was made, one with ordinary skill in the art would have been motivated to have stored storage information in the storage medium, including a start address and data length of the image data being stored in the storage medium, and recording the image data being stored in the storage medium to the recording medium based on the storage information as taught by Anderson et al. in the storage medium of Ogino as a means to maintain the storage medium in a condition to receive new image data from the imaging device. Therefore, at the time the invention was made, it would have been obvious one with ordinary skill in the art to have stored

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storage information in the storage medium as taught by Anderson et al. in the storage medium of Ogino.

11. Claims 3, 4, 9, 10, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogino (US 5 852 467) in view of Ogino (US 5 633 976). For the purposes of this rejection Ogino (US 5 852 467) will be referred to as Ogino [1] and Ogino (US 5 633 976) will be referred to as Ogino [2].

12. For claims 3 and 15, Ogino [1] discloses, as shown in figure 1, converting an image signal obtained by the image pickup operation to the image data by the frame of image (Sample-And-Hold Circuit 4 and A/D Converter 5). However, Ogino [1] does not disclose compressing the image data before storing in the storage medium. Ogino [2] also discloses, as shown in figure 1 and as stated in column 3 (lines 1 – 19), a storage medium (22) and a non-volatile recording medium (26) for storing image data. Ogino [2] discloses the method for recording image wherein the step of storing image data in the storage medium includes the step of compressing (Record Processing 20) the image data before storing in the storage medium. As stated in column 3 (lines 12 – 16), at the time the invention was made, one with ordinary skill in the art would have been motivated to compress the image data before storing in the storage medium as taught by Ogino [2] in Ogino [1] as a means to provide a fixed data amount per image plane. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to compress the image data before storing in the storage medium as taught by Ogino [2] in Ogino [1].

13. As for claim 9, Ogino [1] discloses, as shown in figure 1, the image pickup apparatus further comprising A/D conversion (5) means for converting an image signal obtained by the

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image pickup device from analog image signals to digital image signals and image data conversion means (4) for converting the converted digital image signals to image data.

However, Ogino [1] does not disclose the image pickup apparatus further comprising compressing the image data before storing in the storage medium. Ogino [2] also discloses, as shown in figure 1 and as stated in column 3 (lines 1 – 19), a storage medium (22) and a non-volatile recording medium (26) for storing image data. Ogino [2] discloses an image pickup apparatus comprising compressing (Record Processing 20) the image data before storing in the storage medium. As stated in column 3 (lines 12 – 16), at the time the invention was made, one with ordinary skill in the art would have been motivated to compress the image data before storing in the storage medium as taught by Ogino [2] in the image pickup apparatus of Ogino [1] as a means to provide a fixed data amount per image plane. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to compress the image data before storing in the storage medium as taught by Ogino [2] in the image pickup apparatus of Ogino [1].

14. As for claims 4, 10, and 16, Ogino [1] in view of Ogino [2] disclose compressing the image data before storing in the storage medium. However, Ogino [1] in view of Ogino [2] do not disclose wherein the image data are compressed according to a motion picture compression form. Official Notice is taken that both the concepts and advantages of compressing image data according to a motion picture compression form are well known and expected in the art. It would have been obvious to compress the image data according to a motion picture compression form as a means to compress true color images.

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15. Claims 5, 6, 11, 12, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogino (US 5 852 467) in view of Anderson et al. in further view of Ogino (US 5 633 976).

For the purposes of this rejection Ogino (US 5 852 467) will be referred to as Ogino [1] and Ogino (US 5 633 976) will be referred to as Ogino [2].

16. For claims 5 and 17, Ogino [1] in view of Anderson et al. discloses, as shown in figure 1, converting an image signal obtained by the image pickup operation to the image data by the frame of image (Sample-And-Hold Circuit 4 and A/D Converter 5). However, Ogino [1] in view of Anderson et al. do not disclose compressing the image data before storing in the storage medium. Ogino [2] also discloses, as shown in figure 1 and as stated in column 3 (lines 1 – 19), a storage medium (22) and a non-volatile recording medium (26) for storing image data. Ogino [2] discloses the method for recording image wherein the step of storing image data in the storage medium includes the step of compressing (Record Processing 20) the image data before storing in the storage medium. As stated in column 3 (lines 12 – 16), at the time the invention was made, one with ordinary skill in the art would have been motivated to compress the image data before storing in the storage medium as taught by Ogino [2] in Ogino [1] in view of Anderson et al. as a means to provide a fixed data amount per image plane. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to compress the image data before storing in the storage medium as taught by Ogino [2] in Ogino [1] in view of Anderson et al.

17. As for claim 11, Ogino [1] in view of Anderson et al. discloses, as shown in figure 1, the image pickup apparatus further comprising A/D conversion (5) means for converting an image signal obtained by the image pickup device from analog image signals to digital image signals

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and image data conversion means (4) for converting the converted digital image signals to image data. However, Ogino [1] in view of Anderson et al. do not disclose the image pickup apparatus further comprising compressing the image data before storing in the storage medium. Ogino [2] also discloses, as shown in figure 1 and as stated in column 3 (lines 1 – 19), a storage medium (22) and a non-volatile recording medium (26) for storing image data. Ogino [2] discloses an image pickup apparatus comprising compressing (Record Processing 20) the image data before storing in the storage medium. As stated in column 3 (lines 12 – 16), at the time the invention was made, one with ordinary skill in the art would have been motivated to compress the image data before storing in the storage medium as taught by Ogino [2] in the image pickup apparatus of Ogino [1] in view of Anderson et al. as a means to provide a fixed data amount per image plane. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to compress the image data before storing in the storage medium as taught by Ogino [2] in the image pickup apparatus of Ogino [1] in view of Anderson et al.

18. As for claims 6, 12, and 18, Ogino [1] in view of Anderson et al. in further view of Ogino [2] disclose compressing the image data before storing in the storage medium. However, Ogino [1] in view of Anderson et al. in further view of Ogino [2] do not disclose wherein the image data are compressed according to a motion picture compression form. Official Notice is taken that both the concepts and advantages of compressing image data according to a motion picture compression form are well known and expected in the art. It would have been obvious to compress the image data according to a motion picture compression form as a means to compress true color images.

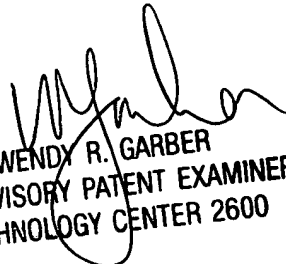
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin P Misleh whose telephone number is 703.305.8090. The examiner can normally be reached on Monday - Friday, 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R Garber can be reached on 703.305.4929. The fax phone numbers for the organization where this application or proceeding is assigned are 703.872.9314 for regular communications and 703.872.9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is 703.306.0377.

JPM
May 5, 2003


WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600